

Amendment to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-15. Cancelled (Without disclaimer or prejudice.)

16. (New) A semiconductor device, comprising:
a semiconductor base body including a capacitor part, the capacitor part
being buried in a planar semiconductor substrate in a three-dimensional cavity
therein, the cavity extending through the substrate by penetrating from a front
surface to a back side of the substrate; an insulating layer formed on the front
surface and on the inner surface of the cavity, a laminate structure comprising a first
electrode layer, a dielectric layer, and a second electrode layer formed inside of the
cavity, each layer being a film, the first electrode layer being exposed from the back
side surface of the substrate, and the capacitor part including a concave portion on
the front surface of the substrate.

17. (New) A semiconductor device as claimed in claim 16, wherein:
the concave portion is filled with an insulating material.

18. (New) A semiconductor device as claimed in claim 16, wherein:

the second electrode layer has an exposed part on the front side of the substrate and the first electrode layer includes an exposed part on the front side of the substrate.

19. (New) A semiconductor device as claimed in claim 16, wherein:

the capacitor part is aligned as a decoupling capacitor for the power source and a ground line of the silicon substrate.

20. (New) A semiconductor device as claimed in claim 16, wherein:

the capacitor part is disposed under input and output pads connected to the substrate.

21. (New) A semiconductor device as claimed in claim 16, wherein:

the capacitor part is disposed in a periphery of input and output pads connected to the substrate.

22. (New) A semiconductor device as claimed in claim 16, wherein the

semiconductor device comprises:

a plurality of the semiconductor base bodies stacked in layers, and electrically conductive ball bodies interposed among the semiconductor base bodies, and wherein the electrically conductive ball bodies are placed in a concave portion of the capacitor parts of the base bodies.

23. (New) A semiconductor device as claimed in claim 17, wherein:
the second electrode layer has an exposed part on the front side of the
substrate and the first electrode layer includes an exposed part on the front side of
the substrate.

24. (New) A semiconductor device as claimed in claim 17, wherein:
the capacitor part is aligned as a decoupling capacitor for the power
source and a ground line of the silicon substrate.

25. (New) A semiconductor device as claimed in claim 18, wherein:
the capacitor part is aligned as a decoupling capacitor for the power
source and a ground line of the silicon substrate.

26. (New) A semiconductor device as claimed in claim 22, wherein:
the capacitor part is aligned as a decoupling capacitor for the power
source and a ground line of the silicon substrate.

27. (New) A semiconductor device as claimed in claim 17, wherein:
the capacitor part is disposed under input and output pads connected
to the substrate.

28. (New) A semiconductor device as claimed in claim 18, wherein:
the capacitor part is disposed under input and output pads connected
to the substrate.

29. (New) A semiconductor device as claimed in claim 19, wherein:
the capacitor part is disposed under input and output pads connected
to the substrate.
30. (New) A semiconductor device as claimed in claim 23, wherein:
the capacitor part is disposed under input and output pads connected
to the substrate.
31. (New) A semiconductor device as claimed in claim 24, wherein:
the capacitor part is disposed under input and output pads connected
to the substrate.
32. (New) A semiconductor device as claimed in claim 256, wherein:
the capacitor part is disposed under input and output pads connected
to the substrate.
33. (New) A semiconductor device as claimed in claim 26, wherein:
the capacitor part is disposed under input and output pads connected
to the substrate.

34. (New) A semiconductor device as claimed in claim 17, wherein the semiconductor device comprises:

a plurality of the semiconductor base bodies stacked in layers, and electrically conductive ball bodies interposed among the semiconductor base bodies, the electrically conductive ball bodies are placed in a concave portion of the capacitor parts of the base bodies.

35. (New) A method for forming a capacitor part in a semiconductor substrate comprising:

forming a three-dimensional cavity which does not penetrate the semiconductor substrate;

forming an insulating film on a front surface of the semiconductor substrate and on an inner surface of the cavity;

forming a laminate structure comprising a first electrode layer, a dielectric layer, and a second electrode layer on the insulating film with each layer being a film; and

removing a back side surface of the semiconductor substrate to expose the first electrode layer.